

eight said slots, or sixty-six said poles and seventy-two said slots or ninety-six said poles and eighty-eight said slots; and a wound winding (7) around said teeth (23) with one of either one coil per slot or two coils per slot.

4. (Amended) A brushless DC motor/generator (10) as claimed in claim 1 characterized in that there are three Hall sensors (24) are mounted near said air gap (25) at predetermined positions and fixed to or side some of said teeth (23).

8. (Amended) A brushless DC Motor/generator (10) as claimed in claim 1 characterized in that said motor (10) is also used as a wheel braking device when used in a generator mode, said rotor (19) being connected to a hub (52) of a wheel (53) powered by said motor (10) when in a motorized mode.

9. (Amended) A brushless DC Motor/generator (10) as claimed in claim 1 characterized in that said control circuit means (14) comprises: a power electronics three phase inverter (28) provided with six power mosfets (30), a current control system (14) coupled to said inverter (28) for generation 120 electrical degrees rectangular phase current pulses, an electronic control system (32) for both a motor and a generator

operation mode of said motor (10) and using a single switch modulation technique.

Add the following New Claims:

X 1. A brushless DC motor/generator (10) as claimed in claim 2 characterized in that a multiple combination of additions of the number of said twenty-two poles and said twenty-four slots (18), such as forty-four said poles and forty-eight said slots, or sixty-six said poles and seventy-two said slots or ninety-six said poles and eighty-eight said slots; and a wound winding (7) around said teeth (23) with one of either one coil per slot or two coils per slot.

X 2. A brushless DC motor/generator (10) as claimed in claim 2 characterized in that there are three Hall sensors (24) are mounted near said air gap (25) at predetermined positions and fixed to or side some of said teeth (23).

X 3. A brushless DC Motor/generator (10) as claimed in claim 2 characterized in that said motor (10) is also used as a wheel braking device when used in a generator mode, said rotor (19) being connected to a hub (52) of a wheel (53) powered by said motor (10) when in a motorized mode.

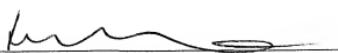
14. A brushless DC Motor/generator (10) as claimed in claim 2 characterized in that said control circuit means (14) comprises: a power electronics three phase inverter (28) provided with six power mosfets (30), a current control system (14) coupled to said inverter (28) for generation 120 electrical degrees rectangular phase current pulses, an electronic control system (32) for both a motor and a generator operation mode of said motor (10) and using a single switch modulation technique.

REMARKS

In order to reduce the filing fee, Applicant have amended claims 3, 4, 8 and 9 by eliminating their multiple dependencies, as well as a minor typographical error. Applicants have also added four new claims.

Respectfully submitted,

By:


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